

Scutellum *with* a deep channel throughout and with transverse ridges

Onychia Haliday

5. See my table from 2 for the other genera.

Abbé Kieffer in Wytsman's *Genera Insectorum*, Fam. Cynipidae, p. 9, has incorrectly included *Solenaspis* Ashm. with the *Onychiinae*; it is a *genuine* Figitine and *not* an Onychiine.

SOME APHIDS ASSOCIATED WITH ANTS.

BY WILMATTE PORTER COCKERELL, COLORADO SPRINGS, COL.

The species of *Lasius* which occur here attend both aphids and mealy bugs in large numbers and great variety. During the past two years my husband and I have made somewhat extended observations on the behavior of the ants toward their captives and upon the distribution both of the ants and their prisoners. We are indebted to Dr. Wm. M. Wheeler for the identification of the ants.

The species of ants studied make their nests under flat stones. In this climate the ants are active during the most of the winter, and live in the corridors under the stones, except in very severe weather, when they retire into their subterranean chambers carrying their aphids and coccids with them. In the long droughts to which this region is subject the ants are obliged in most places, to live far underground, and after such a siege the number of aphids and coccids is small. In the summer, which is the rainy season, the ants' nests are often greatly extended and large chambers are made about the roots of plants.

FORDA KINGII, sp. nov.

♀ Body oval or ovate, gray drab to greenish with sutures inconspicuous. Head not distinct from the rest of the body; eyes small but distinct. The whole body including antennae is sparsely hairy. The cauda is a distinct rounded tail decidedly hairy on the end. Legs as in *Tychea lasii*.

Antennae five jointed, short, and slender; first and second joints subequal, third about three times as long as second, fourth about as long as second, fifth with a short cylindrical spur about one half the diameter of the segment and including spur only slightly longer than the fourth. Sensoria distinct. Length of antennal joints (1) 60 (2) 60 (3) 135 (4) 60 (5) 78 + 12 μ .

HAB. — Found in nests of *Lasius claviger*, *L. flavus*, *Formica* sp., *L. americanus*, at Lawrence, Mass., Andover, Mass., Methuen, Mass. Collected by Mr. George B. King who writes: "feed on roots of grass in ants' nests under stones; young are brownish."

FORDA INTERJECTI, sp. nov.

♀ Body oval or ovate, bright yellow, with sutures more distinct than in *F. kingii*. Head broad with tubercle below the eye. Eyes small and dark. No hairs on body and antennae as in *F. kingii*; antennae more slender. Cauda brown and hairy. Length of antennal joints (1) 45 (2) 60 (3) 120 (4) 60 (5) 114 + 24. A few hairs are found on the end of joint five.

HAB.— Found at Las Vegas, N. M., Mar. 24, Oct. 11, and at Las Valles, N. M., Mar. 22. (W. P. & T. D. A. Cockerell.)

TYCHEA LASHI, sp. nov.

♀ Body oval or ovate, a smooth shining greenish yellow with sutures inconspicuous. Head broad and subtruncate; its front width about half its length and about one fifth its width at point of attachment to body. Eyes moderately large placed near the posterior angle of the head; eyes dark brown or black not on tubercles. No hairs on body, legs, or antennae. Length of body 2 mm.

Prothorax set off from the remaining portion of the body by a slight constriction or deepening of the suture. Remaining body segments without distinct markings or structures above; they grow gradually shorter to the posterior extremity. The cauda is light brown and is not hairy. The spiracles are brownish and very distinct.

The under surface is colored as the upper. The upper portion of the beak is light brownish yellow, extreme tip dark brown.

Legs brown, moderately long; the anterior coxae closely embracing the base of the head, the others widely separated from each other by the broad flattened meso- and meta-sternum. Two distinct claws and two tarsal joints on all the legs.

Antennae five jointed; second and third joints nearly subequal, fourth very short, fifth with short cylindrical spur about one half the diameter of the segment. The spur has a few hairs (three or four—very short) at the end. Sensoria on fourth and fifth joints large and conspicuous. Length of antennal joints (1) 60 (2) 90 (3) 99 (4) 36 (5) 115 + 30.

HAB.— Found, Jan. 12, on banks of Gallinas River near Las Vegas, N. M., with *Lasius americanus*. Collected several times since.

TYCHEA PALLIDULA, sp. nov.

Differs from *T. lasii* by its light yellow color, small size, eyes on tubercles, and relative length of antennal joints, (1) 30 (2) 60 (3) 56 (4) 30 (5) 90 + 18.

HAB.— Beulah, N. M., 8000 ft. Collected March 28 and several times since.

It was thought at first that this was the immature form of *T. lasii* but the specimens examined contained eggs and smaller specimens of *T. lasii* show the third antennal joint as long as or longer than the second and the eyes never on tubercles.

TYCHEA CRASSA, sp. nov.

Differs from *T. lasii* in being larger, globose, of a brownish color, and having hairy legs and antennae and sparsely hairy body. Eyes very prominent on tubercles.

Length of body 3 mm. Length of antennal joints (1) 75 (2) 117 (3) 132 (4) 69 (5) 114 + 30.

HAB. — Found, April 2, at Old Pecos, near Rowe, N. M.

I give below tables for the separation of the species of Forda and Tychea found in America.

FORDA.

- A. Joint 3 not nearly twice as long as 1 + 2.
 - a. Spur on end of 5th joint relatively long . . . *interjecti*, sp. n.
 - b. Spur on end of 5th very short . . . *kingii*, sp. n.
- B. Joint 3 nearly twice as long as 1 + 2 . . . *occidentalis* Hart.

TYCHEA.

- A. Hairy; size large . . . *crassa*, n. sp. and *phaseoli* — probably *phaseoli*.
Garman, 7th Kentucky Rept., but apparently not the European *phaseoli*.
- B. Smooth.
 - a. 2d and 3d subequal.
 - 1. Joint 5 with spur not so long as 3 + 4 . . . *groenlandica* Rübs.
 - 2. Joint 5 with spur longer than 3 + 4
 - 1' eyes on tubercles . . . *lasii*, sp. n.
 - 2' eyes not on tubercles . . . *pallidula*, sp. n.
 - b. 3d nearly as long as 1 + 2 . . . *brevicornis* Hart.

APPEARANCE OF THE 17-YEAR CICADA IN RHODE ISLAND IN 1903.

BY ALPHEUS S. PACKARD, PROVIDENCE, R. I.

The interesting fact of the occurrence of a brood of *Cicada septemdecim* within the limits of Rhode Island was, early in June of the present year, contributed to the Providence Journal by Mr. James M. Southwick, the curator of the Museum of natural history of Roger Williams Park, Providence. Specimens and information